

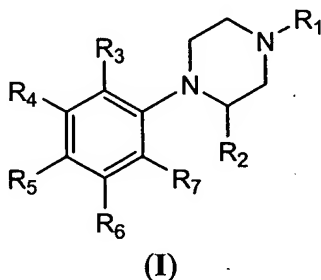
AMENDMENTS TO THE CLAIMS

Please amend the claims according to the clean version and marked-up version of the claim listings provided below.

Clean version of the amended claims:

Clean version

1. (original) A compound of Formula (I):



wherein:

R₁ is H or C₁₋₈ alkyl;

R₂ is C₂₋₄ alkenyl, C₁₋₄ alkyl or C₁₋₄ haloalkyl; and

R₃, R₄, R₅, R₆ and R₇ are each independently H, C₁₋₄ acyl, C₁₋₄ acyloxy, C₁₋₄ acylthioxy, C₂₋₄ alkenyl, C₁₋₄ alkoxy, C₁₋₄ alkyl, C₁₋₄ alkylcarboxamido, C₁₋₄ alkylsulfinyl, C₁₋₄ alkylsulfonamide, C₁₋₄ alkylsulfonyl, C₁₋₄ alkylthio, amino, C₁₋₄ alkylamino, carbo-C₁₋₄-alkoxy, carboxamide, cyano, C₂₋₆ dialkylamino, C₁₋₄ haloalkoxy, C₁₋₄ haloalkyl, C₁₋₄ haloalkylsulfinyl, C₁₋₄ haloalkylsulfonyl, C₁₋₄ haloalkylthio, halogen, hydroxyl, phenyl, and thiol; or

a pharmaceutically acceptable salt, hydrate and solvate thereof;

provided that the compound is not 1-(4-Chloro-phenyl)-2-methyl-piperazine; 1-(3,5-Difluoro-phenyl)-2-methyl-piperazine; 2-Methyl-1-(2-methylsulfonyl-phenyl)-piperazine; 4-Amino-3-fluoro-2-(2-methyl-piperazin-1-yl)-5-nitro-benzonitrile; 2-Methyl-1-phenyl-piperazine; 4-(2-Isopropyl-piperazin-1-yl)-2-trifluoromethyl-benzonitrile; 4-(2-Ethyl-piperazin-1-yl)-2-trifluoromethyl-benzonitrile; 4-(2-Methyl-piperazin-1-yl)-2-trifluoromethyl-benzonitrile; 1-(3-Chloro-phenyl)-2-methyl-piperazine; 2-Methyl-1-m-tolyl-piperazine; 4-(2-Methyl-piperazin-1-yl)-benzamide; 1-(2-Fluoro-phenyl)-2-

methoxy-phenyl)-piperazine; 4-(2-Methyl-piperazin-1-yl)-phenol; 1-(3-Methoxy-phenyl)-2-methyl-piperazine; 2-Methyl-1-(3-trifluoromethyl-phenyl)-piperazine; 1-(4-Methoxy-phenyl)-2-methyl-piperazine; 2-Methyl-1-p-tolyl-piperazine; 2,4-Dimethyl-1-phenyl-piperazine; 4-Chloro-5-(4-ethyl-2-methyl-piperazin-1-yl)-benzene-1,2-diamine; 4-Chloro-5-(4-ethyl-2-methyl-piperazin-1-yl)-2-nitro-phenylamine; 5-(4-Ethyl-2-methyl-piperazin-1-yl)-2-nitro-4-trifluoromethyl-phenylamine; and 5-(4-Ethyl-2-methyl-piperazin-1-yl)-4-methyl-2-nitro-phenylamine.

2. (original) The compound according to claim 1 wherein R_1 is H.

3. (original) The compound according to claim 1 wherein R_1 is C_{1-8} alkyl.

Claims 4 to 8 have been canceled.

9. (amended) The compound according to claim 1 wherein R_2 is C_{2-4} alkenyl.

Claim 10 has been canceled.

11. (amended) The compound according to claim 1 wherein R_2 is C_{1-4} alkyl.

12. (amended) The compound according to claim 1 wherein R_2 is methyl.

Claims 13 to 16 have been canceled.

17. (amended) The compound according to claim 1 wherein R_3 , R_4 , R_5 , R_6 and R_7 are each independently selected from the group consisting of H, C_{1-4} alkoxy, C_{1-4} alkyl, cyano, C_{1-4} haloalkoxy, C_{1-4} haloalkyl and halogen.

Claim 18 has been canceled.

19. (original) The compound according to claim 17 wherein R_3 , R_4 , R_5 , R_6 and R_7 are each independently selected from the group consisting of H, C_{1-4} haloalkoxy, C_{1-4} haloalkyl and halogen.
20. (original) The compound according to claim 17 wherein R_3 , R_4 , R_5 , R_6 and R_7 are each independently selected from the group consisting of H, CH_3 , CH_2CH_3 , $CH(CH_3)_2$, cyano, OCF_3 , CF_3 , F, Cl and Br.
21. (original) The compound according to claim 17 wherein R_3 , R_4 , R_5 , R_6 and R_7 are each independently selected from the group consisting of H, CF_3 , F, Cl and Br.
22. (amended) The compound according to claim 1 wherein R_3 is H or F.
23. (amended) The compound according to claim 1 wherein R_4 is selected from the group consisting of H, cyano, F, Cl and Br.
24. (amended) The compound according to claim 1 wherein R_5 is selected from the group consisting of H, CH_3 , $CH(CH_3)_2$, OCF_3 , CF_3 , F, Cl and Br.
25. (amended) The compound according to claim 1 wherein R_6 is selected from the group consisting of H, F, Cl and Br.
26. (amended) The compound according to claim 1 wherein R_7 is selected from the group consisting of H, CH_3 , F, Cl and Br.
27. (original) The compound of claim 1 selected from the group consisting of:
1-(2,3-Difluoro-phenyl)-2-ethyl-piperazine;
1-(3-Fluoro-phenyl)-2-ethyl-piperazine;
1-(4-Fluoro-phenyl)-2-ethyl-piperazine;
(R)-1-(3-Chloro-4-fluoro-phenyl)-2-methyl-piperazine;
(S)-1-(3-Chloro-4-fluoro-phenyl)-2-methyl-piperazine;
(R)-1-(3,4-Difluoro-phenyl)-2-methyl-piperazine;
(S)-1-(3,4-Difluoro-phenyl)-2-methyl-piperazine;

(R)-1-(3-Chloro-2-fluoro-phenyl)-2-methyl-piperazine;
(S)-1-(3-Chloro-2-fluoro-phenyl)-2-methyl-piperazine;
(R)-1-(4-Fluoro-phenyl)-2-methyl-piperazine;
(S)-1-(4-Fluoro-phenyl)-2-methyl-piperazine;
(R)-1-(3,4-Dichloro-phenyl)-2-methyl-piperazine;
(S)-1-(3,4-Dichloro-phenyl)-2-methyl-piperazine;
(R)-1-(3-Chloro-4-methyl-phenyl)-2-methyl-piperazine;
(S)-1-(3-Chloro-4-methyl-phenyl)-2-methyl-piperazine;
(R)-1-(3,4-Difluoro-phenyl)-2-methyl-piperazine;
(S)-1-(3,4-Difluoro-phenyl)-2-methyl-piperazine;
(R)-1-(3,5-Dichloro-phenyl)-2-methyl-piperazine;
(S)-1-(3,5-Dichloro-phenyl)-2-methyl-piperazine;
(R)-1-(2,5-Difluoro-phenyl)-2-methyl-piperazine;
(S)-1-(2,5-Difluoro-phenyl)-2-methyl-piperazine;
(R)-1-(4-Chloro-3-fluoro-phenyl)-2-methyl-piperazine;
(S)-1-(4-Chloro-3-fluoro-phenyl)-2-methyl-piperazine;
(R)-1-(3-Chloro-2-methyl-phenyl)-2-methyl-piperazine;
(S)-1-(3-Chloro-2-methyl-phenyl)-2-methyl-piperazine;
(R)-1-(5-Chloro-2-fluoro-phenyl)-2-methyl-piperazine;
(S)-1-(5-Chloro-2-fluoro-phenyl)-2-methyl-piperazine;
(R)-1-(5-Chloro-2-methyl-phenyl)-2-methyl-piperazine;
(S)-1-(5-Chloro-2-methyl-phenyl)-2-methyl-piperazine;
1-(3-Chloro-4-fluoro-phenyl)-2-ethyl-piperazine;
1-(3-Chloro-phenyl)-2-ethyl-piperazine;
1-(4-Chloro-phenyl)-2-ethyl-piperazine;
1-(3,4-Difluoro-phenyl)-2-ethyl-piperazine and
(R)-1-(5-Chloro-2-fluoro-phenyl)-2-ethyl-piperazine;
or a pharmaceutically acceptable salt, hydrate and solvate thereof.

28. (original) The compound of claim 1 selected from the group consisting of:
(R)-1-(2-Fluoro-5-trifluoromethyl-phenyl)-2-methyl-piperazine;
(S)-1-(2-Fluoro-5-trifluoromethyl-phenyl)-2-methyl-piperazine;
(R)-1-(4-Chloro-2-fluoro-phenyl)-2-methyl-piperazine;

(S)-1-(4-Chloro-2-fluoro-phenyl)-2-methyl-piperazine;
(R)-1-(3-Chloro-5-fluoro-phenyl)-2-methyl-piperazine;
(S)-1-(3-Chloro-5-fluoro-phenyl)-2-methyl-piperazine;
(R)-1-(3-Fluoro-phenyl)-2-methyl-piperazine;
(S)-1-(3-Fluoro-phenyl)-2-methyl-piperazine;
(R)-1-(2-Fluoro-4-trifluoromethyl-phenyl)-2-methyl-piperazine;
(S)-1-(2-Fluoro-4-trifluoromethyl-phenyl)-2-methyl-piperazine;
(R)-1-(2-Chloro-3-fluoro-phenyl)-2-methyl-piperazine;
(S)-1-(2-Chloro-3-fluoro-phenyl)-2-methyl-piperazine;
(R)-1-(2-Fluoro-5-methyl-phenyl)-2-methyl-piperazine;
(S)-1-(2-Fluoro-5-methyl-phenyl)-2-methyl-piperazine;
(R)-1-(4-Fluoro-biphenyl-3-yl)-2-methyl-piperazine;
(S)-1-(4-Fluoro-biphenyl-3-yl)-2-methyl-piperazine;
(R)-1-(2,5-Difluoro-4-methoxy-phenyl)-2-methyl-piperazine;
(S)-1-(2,5-Difluoro-4-methoxy-phenyl)-2-methyl-piperazine;
(R)-1-(2-Fluoro-4-methyl-phenyl)-2-methyl-piperazine;
(S)-1-(2-Fluoro-4-methyl-phenyl)-2-methyl-piperazine;
(R)-1-(2-Chloro-5-fluoro-phenyl)-2-methyl-piperazine;
(S)-1-(2-Chloro-5-fluoro-phenyl)-2-methyl-piperazine;
(R)-1-(2-Chloro-4-fluoro-phenyl)-2-methyl-piperazine;
(S)-1-(2-Chloro-4-fluoro-phenyl)-2-methyl-piperazine;
(R)-1-(2,4-Dichloro-phenyl)-2-methyl-piperazine;
(S)-1-(2,4-Dichloro-phenyl)-2-methyl-piperazine;
(R)-1-(2,5-Dichloro-phenyl)-2-methyl-piperazine;
(S)-1-(2,5-Dichloro-phenyl)-2-methyl-piperazine;
(R)-1-(3,5-Bis-trifluoromethyl-phenyl)-2-methyl-piperazine;
(S)-1-(3,5-Bis-trifluoromethyl-phenyl)-2-methyl-piperazine;
(R)-1-(4-Fluoro-2-methyl-phenyl)-2-methyl-piperazine;
(S)-1-(4-Fluoro-2-methyl-phenyl)-2-methyl-piperazine;
(R)-1-(2-Chloro-phenyl)-2-methyl-piperazine;
(S)-1-(2-Chloro-phenyl)-2-methyl-piperazine;
(R)-1-(2,3-Dichloro-phenyl)-2-methyl-piperazine;
(R)-1-(2,3-Dichloro-phenyl)-2-methyl-piperazine;

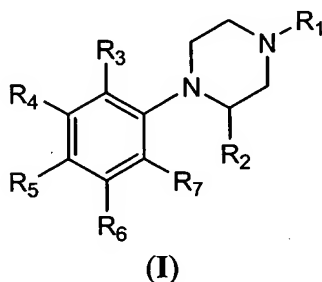
(R)-1-(2,6-Dichloro-phenyl)-2-methyl-piperazine;
(R)-1-(2,6-Dichloro-phenyl)-2-methyl-piperazine;
(R)-1-(2-Chloro-5-trifluoromethyl-phenyl)-2-methyl-piperazine;
(R)-1-(2-Chloro-5-trifluoromethyl-phenyl)-2-methyl-piperazine;
(R)-2-Methyl-1-(4-trifluoromethyl-phenyl)-piperazine;
(S)-2-Methyl-1-(4-trifluoromethyl-phenyl)-piperazine;
(R)-1-(2-Fluoro-3-trifluoromethyl-phenyl)-2-methyl-piperazine;
(S)-1-(2-Fluoro-3-trifluoromethyl-phenyl)-2-methyl-piperazine;
(R)-1-(3-Fluoro-5-trifluoromethyl-phenyl)-2-methyl-piperazine;
(R)-1-(3-Fluoro-5-trifluoromethyl-phenyl)-2-methyl-piperazine;
(R)-1-(4-Chloro-3-trifluoromethyl-phenyl)-2-methyl-piperazine;
(S)-1-(4-Chloro-3-trifluoromethyl-phenyl)-2-methyl-piperazine; and
(R)-2,4-Dimethyl-1-(3-trifluoromethyl-phenyl)-piperazine;
or a pharmaceutically acceptable salt, hydrate and solvate thereof.

29. (original) The compound of claim 1 selected from the group consisting of:
- 1-(2-Bromo-phenyl)-2-vinyl-piperazine;
 - 1-(4-Chloro-phenyl)-2-vinyl-piperazine;
 - 1-(3-Fluoro-phenyl)-2-vinyl-piperazine;
 - 1-(3-Chloro-4-fluoro-phenyl)-2-vinyl-piperazine;
 - 1-(3-Chloro-phenyl)-2-vinyl-piperazine;
 - 1-(3-Bromo-phenyl)-2-vinyl-piperazine;
 - 1-(3,5-Dichloro-phenyl)-2-vinyl-piperazine;
 - 1-(2-Bromo-4-isopropyl-phenyl)-2-vinyl-piperazine;
 - 1-(2-Bromo-4-trifluoromethoxy-phenyl)-2-vinyl-piperazine;
 - 1-(2-Bromo-4-trifluoromethyl-phenyl)-2-vinyl-piperazine;
 - 3-(2-Vinyl-piperazin-1-yl)-benzonitrile;
 - 1-(3,5-Difluoro-phenyl)-2-vinyl-piperazine;
 - 1-*o*-Tolyl-2-vinyl-piperazine and
 - 1-(2,3-Difluoro-phenyl)-2-vinyl-piperazine;
- or a pharmaceutically acceptable salt, hydrate and solvate thereof.

30. (amended) The compound according to claim 1 wherein said compound is an *R* enantiomer.

31. (amended) The compound according to claim 1 wherein said compound is an *S* enantiomer.

32. (original) A pharmaceutical composition comprising a pharmaceutical acceptable carrier in combination with at least one compound according to Formula (I):



wherein:

R₁ is H or C₁₋₈ alkyl;

R₂ is C₂₋₄ alkenyl, C₁₋₄ alkyl or C₁₋₄ haloalkyl; and

R₃, R₄, R₅, R₆ and R₇ are each independently H, C₁₋₄ acyl, C₁₋₄ acyloxy, C₁₋₄ acylthioxy, C₂₋₄ alkenyl, C₁₋₄ alkoxy, C₁₋₄ alkyl, C₁₋₄ alkylcarboxamido, C₁₋₄ alkylsulfinyl, C₁₋₄ alkylsulfonamide, C₁₋₄ alkylsulfonyl, C₁₋₄ alkylthio, amino, C₁₋₄ alkylamino, carbo-C₁₋₄-alkoxy, carboxamide, cyano, C₂₋₆ dialkylamino, C₁₋₄ haloalkoxy, C₁₋₄ haloalkyl, C₁₋₄ haloalkylsulfinyl, C₁₋₄ haloalkylsulfonyl, C₁₋₄ haloalkylthio, halogen, hydroxyl, phenyl, and thiol; or a pharmaceutically acceptable salt, hydrate and solvate thereof.

33. (amended) A method of modulating a 5HT_{2C} receptor comprising contacting said receptor with a therapeutically effective amount of a compound as in claim 1.

34. (original) The method according to claim 33 wherein said compound is an agonist of said receptor.

35. (amended) A method of prophylaxis or treatment of disorders of the central nervous system; damage to the central nervous system; cardiovascular disorders; gastrointestinal disorders; diabetes insipidus or sleep apnea comprising administering to an individual in need of such prophylaxis or treatment a therapeutically effective amount of a compound according to claim 1 or a pharmaceutical composition according to claim 32.

36. (original) The method according to claim 35 wherein the disorders of the central nervous system are selected the group consisting of depression, atypical depression, bipolar disorders, anxiety disorders, obsessive-compulsive disorders, social phobias or panic states, sleep disorders, sexual dysfunction, psychoses, schizophrenia, migraine and other conditions associated with cephalic pain or other pain, raised intracranial pressure, epilepsy, personality disorders, Alzheimer disease, age-related behavioral disorders, behavioral disorders associated with dementia, organic mental disorders, mental disorders in childhood, aggressivity, age-related memory disorders, chronic fatigue syndrome, drug and alcohol addiction, obesity, bulimia, anorexia nervosa and premenstrual tension.

37. (original) The method according to claim 36 wherein the disorder of the central nervous system is obesity.

Claim 38 has been canceled.

39. (original) The method according to claim 36 wherein the sexual dysfunction is Male erectile dysfunction.

Claims 40 to 44 have been canceled.

45. (amended) The method according to claim 37 or 39 wherein said individual is a human.

46. (amended) A method of decreasing food intake of an individual comprising administering to said individual a therapeutically effective amount of a compound according to claim 1 or a pharmaceutical composition according to claim 32.

Claim 47 has been canceled.

48. (amended) The method according to claim 46 wherein said individual is a human.

49. (amended) A method of inducing satiety in an individual comprising administering to said individual a therapeutically effective amount of a compound according to claim 1 or a pharmaceutical composition according to claim 32.

Claim 50 has been canceled.

51. (amended) The method according to claim 49 wherein said individual is a human.

52. (amended) A method of controlling weight gain of an individual comprising administering to said individual suffering from weight control a therapeutically effective amount of a compound according to claim 1 or a pharmaceutical composition according to claim 32.

Claim 53 has been canceled.

54. (amended) The method according to claim 52 wherein said individual is a human.

Claims 55 to 58 have been canceled.

59. (amended) A method of producing a pharmaceutical composition comprising admixing at least one compound according to claim 1 and a pharmaceutically acceptable carrier.

Claims 60 to 78 have been canceled.

79. (new) The compound according to claim 1 wherein:
R₁ is H, methyl, ethyl, *n*-propyl, *iso*-propyl or *n*-butyl;
R₂ is a vinyl, methyl, ethyl, *n*-propyl, C₁₋₄ haloalkyl or -CF₃;
R₃ is H or F;
R₄ is selected from the group consisting of H, cyano, F, Cl and Br;
R₅ is selected from the group consisting of H, CH₃, CH(CH₃)₂, OCF₃, CF₃, F, Cl and Br;
R₆ is selected from the group consisting of H, F, Cl and Br; and
R₇ is selected from the group consisting of H, CH₃, F, Cl and Br.

80. (new) A method of treating a 5HT_{2C} receptor associated disorder comprising administering to an individual in need of such treatment an effective amount of a compound according to claim 1, or a pharmaceutical composition according to claim 32.